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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/565,554

01/23/2006

Keijitsu Tanaka

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2075

23373 7590 08/07/2008  
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EXAMINER

SHAHNAN SHAH, KHATOL S

ART UNIT

PAPER NUMBER

1645

MAIL DATE

DELIVERY MODE

08/07/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/565,554	<b>Applicant(s)</b> TANAKA ET AL.	
	<b>Examiner</b> Khatol S. Shahnan-Shah	<b>Art Unit</b> 1645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 1-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/23/06, 6/13/06</u>  | 6) <input type="checkbox"/> Other: _____                          |

***DETAILED ACTION***

1. Applicants' amendments of 1/23/2006 are acknowledged. Claims 3, 5, 6, 12, 13, 14, 16 and 17 have been amended. Claims 1-18 are pending and under consideration.

***Drawings***

2. The drawing of 1/23/2006 in this application is accepted by the examiner.

***Information Disclosure Statement***

3. Information disclosure statements, received 1/23/2006 and 6/13/2006 are acknowledged. The references are considered by the examiner (see attached 1449 forms).

***Election/Restrictions***

4. Applicants' election of 4/30/2008 is acknowledged. Applicants elected group II, claims 9-18 which are drawn to agent used in diagnostic assay without traverse. Claims 9-18 are under consideration.

Claims 1-8 are withdrawn from further consideration as being drawn to non-elected inventions.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9-18 are rejected under 35 U.S.C. 103(a) as being obvious over Clausen et al. (US 5, 563040) in view of Hirano et al. (Journal of Wood Science, vol, 46, 2000) Prior art of record applicants' 1449.

Claims 9-16 are drawn to an agent used for diagnosing wood decay which comprises an antibody obtained by sensitizing an animal with an antigen which is a protein having a molecular weight of 1000-100,000 obtained by culturing a wood destroying fungus, claims 17-18 are drawn to a dot blot kit for diagnosing decay in wood.

Clausen et al. teach an agent used for diagnosing wood decay which comprises an antibody obtained by sensitizing an animal with an antigen which is a protein obtained by culturing a wood destroying fungus (see abstract and claims). Clausen et al. teach brown rot fungus *Postia placenta* from family Basidiomycetes (see column 3), sensitizing an animal with an antigen and production of monoclonal and polyclonal antibodies (see example 1 and claims). Clausen et al. teach other fungi *Gloeophyllum trabeum*, *Coniophora puteana* and *Serpula* species (see column 7). Clausen et al. teach limitation of claims 17-18 a diagnostic kit having a polyester cloth device and a capture zone for the substrate (see claims 12-14). Clausen et al. do not teach specifically a molecular weight of 1000-100,000 or *Fomitopsis palustris*. These deficiencies are overcome by the teachings of Hirano et al.

Hirano et al. teach a fraction containing low molecular weight purified protein from cultures of brown rot fungus *Tyromyces palustris* (i.e. *Fomitopsis palustris*, new name) see abstract. Polyclonal antibodies raised to the fraction were used for immunogold labeling of spruce (see page 45). Hirano et al. teach culture conditions; preparation of protein fraction, preparation of polyclonal antibodies; immunoblotting and ELISA (see pages 46-47).

Therefore, it would have been obvious to one of ordinary skill in the art to use the *protein* as taught by Hirano et al. in the assay of Clausen et al. to provide the claimed invention, since as taught in Clausen et al. numerous modifications and embodiments devised by those skilled in the art other than the ones specifically described above, may be employed to detect the presence of the suspected antigens. For instance antibodies for other components or other groups of fungi can alternatively be used in this invention (see

column 5). As to specific temperatures and molecular weights, using different temperatures and molecular weights would have been considered optimization of experimental parameters and would be obvious to one of ordinary skill in the art.

### ***Status of the Claims***

7. No claims are allowed.

### ***Conclusion***

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khatol Shahnian-Shah whose telephone number is (571)-272-0863. The examiner can normally be reached on Monday-Friday 7:30 AM-5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shanon Foley can be reached on 571-272-0898. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Khatol Shahnian-Shah  
August 3, 2008

/Shanon A. Foley/  
Supervisory Patent Examiner, Art Unit 1645